Practical Decision-Making Tools for Identifying Safer Alternatives OEHHA-COEH Workshop October 1 and 2, 2007

Objectives and Discussion Questions

Objectives:

- 1. Discuss and describe the kinds of data that are needed to implement a robust framework for identifying problem chemicals and safer alternatives
- 2. Identify models and approaches that could be incorporated into existing Cal/EPA programs to better identify and prioritize chemicals of concern for assessment or action.

Some examples of relevant programs include the SB 25 program under which air pollutants of relevance for children must be identified and the Proposition 65 program under which candidate chemicals for listing and high priority chemicals for assessment must be determined.

3. Identify models and approaches that could be used to better respond to questions about the relative hazards of chemicals in use or proposed for use.

For example, OEHHA has been working to advise the California Air Resources Board on alternative dry-cleaning processes to replace perchloroethylene and on replacement chemicals for reactive volatile organic compounds.

- 4. Review and evaluate existing methods and possible approaches for distinguishing lower and higher hazard chemicals to help inform efforts toward stewardship and sustainability.
- 5. Consider how, when and whether to use new methods (including, for example, genomics, proteomics; structure-activity approaches; and "read-across" methods) and new ways of thinking about the actions of chemicals (including, for example, assessment of perturbations that can lead to multiple effects) in characterizing the toxicity and exposure potential of chemicals.

List of questions for both Sessions One and Two:

- 1. What was the underlying purpose(s) for which the approach or tool was developed?
- 2. What hazard traits does the approach or tool address?
- 3. What types of data does the approach or tool rely on?
- 4. Does the approach or tool address prenatal effects or effects on children?
- 5. Does the program under which the approach or tool is used have the authority to require the production of new data? If so, how is that accomplished?
- 6. What is the most novel or significant aspect of the approach or tool?

- 7. What have been the major successes in applying the approach or tool? What have been the major pitfalls and weaknesses?
- 8. What elements are missing from the approach or tool? How could the approach or tool be improved?
- 9. What have been the major lessons learned in applying the approach or tool?

Additional questions for Session One only:

1. What are some common threads in the prioritization approaches?

Additional questions for Session Two only:

- 1. How have the tools been validated and updated?
- 2. Can existing tools for predicting toxicity and exposure be applied more widely in California?
- 3. How could new tools (e.g., high throughput assays) be put to practical use?

Questions for Session Three (Facilitated Discussion):

- 1. What are the key issues that OEHHA should consider in developing a framework for identifying problem chemicals and safer alternatives? What attributes of the methods/approaches discussed in prior sessions could OEHHA incorporate into the framework? What's missing?
- 2. How could children's health considerations be incorporated into the framework?
- 3. How could data gaps and emerging toxicology issues be addressed in a framework for identifying safer alternatives?
- 4. What are the most promising aspects of the new tools and methods that are becoming available? What are some of the barriers that would have to be addressed in order to incorporate new methods and new types of data into an OEHHA framework? What are some approaches to addressing these barriers?
- 5. What can we do right now to implement some of these ideas?